Amendments to the Claims

1. (Original) An intervertebral spacer for implantation into a disc space between adjacent vertebrae, said spacer comprising a deformable body formed to include a shape memory polymeric material, said body comprising: a first bearing surface, an opposite, second bearing surface and a peripheral sidewall positioned therebetween, said spacer having a lateral axis extending therethrough and positioned to lie substantially parallel said first bearing surface, and wherein said body deforms in a direction along said lateral axis upon application of a selected stimulus.

2. (Original) The spacer of claim 1 wherein the spacer is cylindrical.

3. (Original) The spacer of claim 1 wherein the spacer comprises an elongate body.

4. (Original) The spacer of claim 1 wherein the spacer is "C" shaped.

5. (Original) The spacer of claim 1 wherein the peripheral sidewall collapses back onto itself.

6. (Original) The spacer of claim 1 wherein the peripheral sidewall comprises a first lateral wall portion, an opposite second lateral wall portion, and an end wall portion positioned therebetween.

7. (Original) The spacer of claim 1 wherein the body comprises an interior cavity.

8. (Original) The spacer of claim 1 wherein the selected stimuli includes thermal or photoradiation energy.

9. (Original) The spacer of claim 1 wherein the selected stimuli includes heating to a deformation temperature between about 38° C and about 100° C.

10. (Original) The spacer of claim 9 wherein the selected stimuli includes heating to a temperature between about 40° C and about 65° C.

11. (Original) The spacer of claim 9 wherein the body at a temperature below the deformation temperature exhibits a compression modulus comparable to that of cortical bone.

12. (Original) The spacer of claim 9 wherein the body is adapted to withstand 500 N compressive force without significant deformation when maintained below the deformation temperature.

13. (Original) The spacer of claim 1 wherein the body is provided in a first configuration having a first cross-sectional profile positioned orthogonal to said lateral axis, wherein said body deforms to a second configuration having a second cross-sectional profile positioned orthogonal to said longitudinal axis, said second cross-sectional profile smaller than said first cross-sectional profile.

14. (Original) The spacer of claim 1 wherein the polymeric material is biodegradable.

15. (Original) The spacer of claim 1 wherein the shape memory polymeric material is selected from the group consisting of: polylactide, polyglycolide, poly(lactide-co-glycolide), polyurethane, poly(ethylene-co-vinyl acetate), poly(ethylene-co-propylene), poly(ethylene-co-propylene-co-diene), poly(ε-caprolactone), poly(β-hydroxybutyrate), poly(β-hydroxybutyrate-co-hydroxyvalerate), poly(methacrylate), poly(methyl methylacrylate), poly(acrylate), and mixtures, copolymers and blends thereof.

16. (Original) The spacer of claim 1 wherein the body is provided in an original configuration.

17. (Original) A spacer for insertion into the spine, said spacer formed of a material comprising a shape memory polymer and provided in an original configuration and deformable to a second configuration, wherein said spacer reverts to the original configuration by action of the shape memory polymer.

18. (Original) A method of orthopedic treatment, said method comprising:

preparing one or more vertebrae to receive a spacer,

implanting a spacer to contact one or more vertebrae, said spacer formed of a material comprising a shape memory polymer and provided in an original configuration and deformable to a second configuration, wherein said spacer reverts to the original configuration by action of the shape memory polymer, and

subjecting said spacer to a selected stimulus wherein said spacer deforms.

19. (Original) The method of claim 18 wherein said subjecting comprises subjecting the spacer to a selected stimulus after the spacer has been implanted.

20. (Original) The method of claim 18 wherein the selected stimuli comprises heating the spacer to a temperature between about 40° C and about 65° C.

21-27. (Canceled)